Natural Resources - Miscellaneous Series

16.

USA OPERATIONS MISSION TO SAUDI ARABIA
American Embassy - Jidda

February 24, 1956

Brigadier General O. L. Grover
Commander, 322d Air Base Group (USAFE)
APO 326, c/o Postmaster
New York, N.Y.

Dear General Grover:

On the chance that you have not as yet received my letter to you dated February 20, the bearer has kindly agreed to give this copy to you tomorrow and if it will be possible for you to give him your reply, I shall appreciate it very much.

Mr. J. H. H. Langford, Deputy Representative, Middle East Region, International Civil Aviation Organization, with headquarters in Cairo, is now in Jidda and is interested in having a meeting here with Point IV, FAO, your meteorologist and others concerned for the purpose of trying to develop an adequate meteorological system for this country.

Kindest regards to you.

Sincerely yours,

Harland J. Carman
Director
USA Operations Mission to Saudi Arabia

Incl. 1
Letter to Gen. Grover
dated Feb. 20, 1956

Meteorological Survey (see file)

USA OPERATIONS MISSION TO SAUDI ARABIA
American Embassy - Jidda

February 20, 1954

Brigadier General O. L. Grover
Commander, 1611th Air Base Group (USAFE)
APO 633, c/o Postmaster
New York, N. Y.

Dear General Grover:

During a visit to Jidda by Dr. John Crenson, Chief Advisor of the Beirut OSA office, we discussed the desirability of developing technical assistance projects to aid the Saudi Government establish a meteorological service and a communications system that would meet the needs of several different ministries without duplicating equipment and personnel.

Attached is a copy of a preliminary draft agreement for a project to establish meteorologic and hydrologic stations for the Ministry of Agriculture, plus a copy of a memorandum from Crenson outlining his views about the needs for an aviation weather service. A suggestion was made that you might be in a position to assign a competent meteorologist from the 29th Weather Squadron to make a survey and recommendations which would enable USOM to draft a single technical assistance project in this field. Since a well developed weather service requires the use of an efficient communications system, it would be desirable to have a meteorological survey completed as soon as possible in order to have a report for use by the radio-telecommunications technician who will survey the requirements of several ministries for an integrated communications service.

Regarding a communications system for Saudi Arabia, I am trying to arrange a meeting with the United Nations advisor to the Ministry of Communications to discuss the urgent need for coordinated planning to avoid the installation of duplicate or triplicate communications networks by several ministries. Any information you may receive on this subject would be appreciated.

Any assistance you can give us on these projects will be appreciated.

Sincerely yours,

THE FOREIGN SERVICE
OF THE
UNITED STATES OF AMERICA

ADDRESS REPLY REFER TO

Jidda, Saudi Arabia,
February 18, 1954.

Mr. Harland J. Corson,
Country Director,
USAOM, Saudi Arabia.

Dear Mr. Corson:

In accordance with your request that Mr. Sinclair and I redraft the proposed technical assistance agreement to provide a VOR station at Jidda and train Saudi Arabian personnel, the format of a final draft has been prepared except for certain U.S. dollar and Saudi Arabian riyal figures which must be ascertained and included in Article VII. This will be done in time to meet with Prince Mishe'al on March 1st.

Recommendations concerning a meteorological survey of Saudi Arabia are attached.

We have discussed the problem of establishing a communications system for the country without duplication or triplication of facilities, at length. I hope you will be successful in bringing some order to the confused situation which now exists.

At such time as a substantial economic aid program gets under way, it will be appreciated by all of us concerned with the development of civil aviation if consideration will be given to aviation projects in relation to the needs of the air transport system for airways and airport facilities, just as previous consideration to the need for ports, railroads and highways has been given. Since the airplane is the only means of travel and communication (unless you walk or ride a camel) in many areas of Saudi Arabia, I feel that some of these needs should not be underestimated.

Your friendly cooperation during my visit is appreciated sincerely and I shall look forward to working with you again.

Sincerely yours,
[illegible]
[illegible]
[illegible]
[illegible]

MEMORANDUM

February 18, 1954

TO: Mr. Harland J. Gorson, Country Director, USAOM, Saudi Arabia.

FROM: Mr. John Brennan, Chief Advisor, Beirut International Field Office, U. S. Embassy, Beirut.

During a meeting in your office February 16, 1954, the need for establishment of a Meterological Service in Saudi Arabia to meet the requirements of aviation as well as agricultural development was discussed. In accordance with your request, I have studied the draft of a technical assistance agreement between the USAOM and the Ministry of Agriculture, reviewed the "Local Forecasting Study" prepared by the 29th Weather Squadron at Dhahran, discussed the problem with Saudi Arabian Airlines Technical Manager William Blankenship, and have developed the following recommendations for your consideration:

1. Before any technical assistance project agreement is reached between USAOM and any one Ministry of the Saudi government, a complete survey of the needs of the country should be made by a competent meteorologist. This survey should take into consideration at least the following:

a. The Saudi Arabian Airlines is conducting scheduled and special flight operations to almost every part of the Arabian peninsula and to several neighboring countries. At the present time weather information is obtained on an "on request" basis for the most part. Although the Airline has planned for the establishment of a meteorological service, has ordered and received part of the specialized equipment to implement the service, and has issued to the Chief Meteorologist of the Civil Aviation Department some of the instruments which are now in use at Jidda and Riyadh.

2. The Royal Saudi Arabian Air Force is now engaged in an intensive program of flight training, and will need weather information for training and tactical operations as it expands.

3. The Arabian American Oil Company has a sizeable fleet of aircraft engaged in exploration, pipeline patrol and logistical support of its operations. Its requirements for weather information are assumed to be similar to those of Saudi Arabian Airlines and as the major income producing business organization in the country should be accommodated with any special services it may need.

4. From a U.S. self interest point of view there are two considerations:

a. Two major American flag carriers, TWA and PAA, operate scheduled international flights into or over Saudi Arabia and are not now provided with accurate flight forecasts because of a lack of upper air observations in the area.

b. U.S. Air Force transport operations encounter the same difficulties as TWA and PAA, but additionally, they could be seriously handicapped in

the event tactical operations were necessary. The Commanding General at Dhahran would certainly have recommendations covering this aspect of the problem.

5. The Ministry of Agriculture undoubtedly needs weather statistical information as well as forecasting and should be considered in any overall plan to provide such information.

Consideration should be given to the fact that the Ministry of Defense and Civil Aviation has by far the greatest interest in the establishment of a meteorological service and it may be necessary to develop a project between the USAOM, the Ministry of Defense and Civil Aviation and the Ministry of Agriculture, with each of the two Ministries contributing Saudi funds in proportion to their respective requirements.

Any well developed meteorological service which will meet the requirements of the many organizations concerned would involve an elaborate communications system for the collection of the observation data and the dissemination of weather analysis and facts. I think it is obvious that a competent American meteorologist should be obtained to survey the needs of the various agencies in Saudi Arabia for weather information. This survey should be coordinated with the proposed communications survey project. In addition, the meteorologist should be prepared to actually establish certain of the weather stations for which equipment is now available from Saudi Arabian Airlines and conduct on-the-job training of the technicians who have received formal training at Dhahran. General Grover has indicated that an adequate number of trained observers have received training and should be available to implement a weather service.

MEMORANDUM

February 18, 1954

TO: The Ambassador

FROM: Mr. John Brennan, Chief Adviser, Beirut International Field Office, U.S. Embassy, Beirut.

In accordance with your request during our meeting with General Brewer and Major Ragland at Dhahran Sunday evening, there follows a summary of my conversations with Mr. Gorson, members of the USAGM staff, and with Mr. Blankenship of Saudi Arabian Airlines.

On Tuesday, February 16, Mr. Gorson, Mr. Sinclair and I discussed at length the draft of a technical assistance project to install a Visual Omnidirectional Radio Range station at Jidda and the associated training of Saudi Arabian nationals in connection with the installation, operation and maintenance of the equipment. Your views concerning the relationship of this project to the current discussions with the Minister of Finance about agreement in principle to an economic aid program were outlined. Mr. Gorson indicated that since this is to be a joint technical assistance project agreement between USAGM-S.A. and the Ministry of Defense and Aviation, it would not affect the economic aid discussions in any way. He would prefer to present a complete draft to the Minister by March 1st and asked me to work out the details with Mr. Sinclair, present a final draft to him for approval, and be on hand in Jidda March 1st for a discussion with Prince Mishaal so that the Saudi fund contribution can be included in the budget now in the process of completion. I agreed to do this. Mr. Gorson said he would discuss the matter with you upon your return to Jidda.

Also discussed was the requirement for a technical assistance project to establish a Meteorological service. It was learned that a draft agreement for a joint project between USAGM and the Ministry of Agriculture had already been prepared. Mr. Gorson gave me the draft for review with Saudi Arabian Airlines and asked for recommendations as to how the civil Aviation needs could be compared with the Ministry of Agriculture requirements for meteorological services and provided for under a single coordinated technical assistance project. This matter was discussed with Mr. Blankenship at length, an inventory of specialized weather equipment and supplies on hand at Saudi Arabian Airlines was compiled, General Brewer's "Local Forecasting Study" prepared by the 8th Weather Squadron was reviewed, and a memorandum of recommendations to be included in a single project agreement was prepared and presented to Mr. Gorson before my departure. A copy is attached.

Regarding the possible installation of parallel radio telephone or radio telegram stations by the Ministry of Finance, Ministry of Defense and Aviation and Ministry of Communications, Mr. Gorson was very interested in obtaining all pertinent information available. In the interest of brevity, this matter was asked even that we be advised of the progress of a specified radio telephone communication system for the Ministry of Defense and Aviation and the communication needs of the country, with a Ministry of Communications point of

view. I recommended that consideration be given to obtaining a competent technician at the earliest possible time since the German personnel, contracted for by the Minister of Finance, have arrived in Saudi Arabia and the equipment presumably is enroute. Mr. Cormon will undertake to bring the situation to the attention of the Saudi officials who are concerned in an attempt to bring about the establishment of a communications system suitable to the needs of the three Ministries without a duplication or triplication of equipment involving added expense not to mention the complications of frequency assignment which would be unavoidable.

Finally, the Saudi requirements, from a Civil point of view, for a minimum number of airways beacons, airport improvement, and civil aviation department organization were discussed. Should an economic aid program of substantial proportions materialize, the airways and airports used by international operators as well as Saudi Arabian Airlines should not be overlooked as worthy improvement projects which are vital to the sound development of a modern air transportation system in Saudi Arabia. Surely the relative importance of civil aviation in Arabia justifies the expenditure of available funds for aviation projects as much or more than projects for the improvement of harbors, highways and railroads.

AGREEMENT
FOR ESTABLISHMENT OF
METEOROLOGIC AND HYDROLOGIC STATIONS
BETWEEN
THE GOVERNMENT OF THE KINGDOM OF SAUDI ARABIA
AND
THE GOVERNMENT OF THE UNITED STATES OF AMERICA

The Government of the United States of America and the Government of the Kingdom of Saudi Arabia have agreed as follows:

ARTICLE I. COOPERATIVE PARTICIPATION

Pursuant to the General Agreement for Technical Cooperation signed on behalf of the two Governments at Jidda on January 17, 1951, and to the Agreement for the Technical Cooperation Program in Natural Resources between the Governments of the United States of America and the Kingdom of Saudi Arabia dated November 10, 1952, this Project Agreement for the establishment of meteorologic and hydrologic stations in Saudi Arabia is entered into between the Government of the Kingdom of Saudi Arabia, represented by the Minister of Agriculture (hereinafter referred to as the "Minister"), and the Government of the United States of America, represented by the Director of the United States of America Operations Mission to Saudi Arabia (hereinafter referred to as the "Director").

ARTICLE II. OBJECTIVE

1. The great strides made in man's understanding of the weather are largely due to the development of weather instruments that are used in conjunction with visual observations. While the airplane requires detailed data on the weather, the farmer, the herdsman, fisherman and

others could also use this information.

2. A primary purpose of this project is to establish a series of recording stations, meteorologic stations, staff stations and recording well gages with which the amount of rainfall, the temperature, humidity and wind velocity can be accurately recorded. It is also proposed to maintain records of these results so that basic data may be compiled for Saudi Arabia. The main objective of this project is to assist the Government of the Kingdom of Saudi Arabia in making such meteorologic and hydrologic data available for the use of its people.

ARTICLE III. PLAN OF OPERATION

1. The general plan of operation will be as follows:

(a) Recording gaging stations will be constructed to measure floods automatically. They are planned for installation in about eight localities, including Riyadh, Wadi Gizan, Wadi Baish, Wadi Tiwad, Wadi Bali, Wadi Abha, and two other places.

(b) Staff gaging stations are to be established at the following Wadis: Rabigh, Khulais, Fatima, Yiba, Dhamad, Sakra, Tasher, and Beghab. These stations also measure floods but require the services of an observer.

(c) Meteorologic stations are to be constructed at the following places: Abha, Dhahran al Yamen, Al Darb, Al Qunfidha, Jizan, Gasim, Hofuf, Al Kharj, Taif, Yanbo, Hail, Biba and Tabuk. These will automatically measure rainfall, temperature, humidity, and wind velocity.

(d) In addition, recording gages are contemplated for wells at Gizan, Tiwad, Khulais, Wadi Hanifa and Wadi Dawir.

ARTICLE IV. ADMINISTRATION OF PROJECT

1. In carrying out this project, the Minister shall provide the following:

(a) The land upon which the installation will be erected.

(b) Local labor for constructing the buildings and shelters, and assistance in the installation of equipment.

(c) Local observers who will report instrument readings to the proper authorities.

(d) All local construction materials required.

(e) Transportation of instruments and materials to building sites, and petroleum products for required vehicles.

(Note: Items in this section are shown in detail in Appendix "A" attached hereto and by this reference made a part hereof.)

2. The Director shall designate a technical specialist, acceptable to the Ministry, to serve in a technical capacity in project activity. From funds allocated in Article V of this Agreement the Director shall:

(a) Provide the scientific instruments required in each station. Delivery of scientific instruments to the several project sites, however, shall be carried out only upon completion of the shelter or housing required for such instruments at that site.

(b) Provide for supervision of installation of instruments.

3. The Minister shall be responsible for ensuring the cooperation and coordination of Government officials, local authorities and persons in the areas of activity.

ARTICLE V. FINANCING

1. From the contributions of the two Governments to the Natural Resources Program Agreement, there is allocated for the execution of this project the following sums:

		Dollar Equivalent
Share of SAG	S.R. 162,811	45,000
Share of USA	$ 11,500	$ 11,500

2. The funds so allocated are for payment of expenses estimated in Appendix "A".

3. The funds herein allocated shall be available for expenditure at any time during the continuation of this project agreement; provided, however, that obligations incurred shall not exceed the total allocation of both parties hereto.

ARTICLE VI. ENTRY INTO FORCE AND DURATION

This Project Agreement shall enter into force on the day that it is signed and shall remain in force until three months after either party shall have given notice in writing to the other of intention to terminate it, but in no event shall it extend beyond the life of the Natural Resources Program Agreement.

Done in duplicate, in English and Arabic languages, at Jidda, Saudi Arabia, this _____ day of _____, 1954.

Director United States of American Operations Mission to Saudi Arabia	Minister of Agriculture Kingdom of Saudi Arabia

APPENDIX "A"

Estimated Items of Expenditure for the Meteorologic and Hydrologic Stations Project

Project No. 1 FY-1954

Object of Expenditure	Rivals	Amount by SAG Dollar Equivalent	Amount by U.S. Govt. Dollars
Local Labor	56,138	15,296	
Local Observers	8,655	2,358	
Transportation of Things	7,340	2,000	
Local Equipment	1,028	280	
Local Materials	81,944	22,328	
Demonstration Prof. & Scientific Equip.			10,528
Installation of Equipment			700
Transportation, Freight, etc.			272
Petroleum Products & Spares	10,048	2,738	
	165,811	45,000	11,500

AGREEMENT
FOR ESTABLISHMENT OF
METEOROLOGICAL AND HYDROLOGICAL STATIONS
BETWEEN
THE GOVERNMENT OF THE KINGDOM OF SAUDI ARABIA
AND
THE GOVERNMENT OF THE UNITED STATES OF AMERICA

The Government of the United States of America and the Government of the Kingdom of Saudi Arabia have agreed as follows:

ARTICLE I. COOPERATIVE PARTICIPATION

Pursuant to the General Agreement for Technical Cooperation signed on behalf of the two Governments at Jidda on January 17, 1951, and to the Agreement for the Technical Cooperation Program in Natural Resources between the Governments of the United States of America and the Kingdom of Saudi Arabia dated November 10, 1952, this Project Agreement for the establishment of meteorological and hydrological stations in Saudi Arabia is entered into between the Government of the Kingdom of Saudi Arabia, represented by the Minister of Agriculture (hereinafter referred to as the "Minister"), and the Government of the United States of America, represented by the Director of the United States of America Operations Mission to Saudi Arabia (hereinafter referred to as the "Director").

ARTICLE II. OBJECTIVE

1. The great strides made in recent years in the accuracy of the weather forecasts are largely due to the development of weather instruments that are used in conjunction with visual observations. While the airplane requires detailed data on the weather, the farmer, the herdsman, fisherman and

others could also use this information.

2. A primary purpose of this project is to establish a series of recording stations, meteorological stations, staff stations and recording well gages with which the amount of rainfall, the temperature, humidity and wind velocity can be accurately recorded. It is also proposed to maintain records of these results so that basic data may be compiled for Saudi Arabia. The main objective of this project is to assist the Government of the Kingdom of Saudi Arabia in making such meteorological and hydrological data available for the use of its people.

ARTICLE III. PLAN OF OPERATION

1. The general plan of operation will be as follows:

(a) Recording gaging stations will be constructed to measure floods automatically. They are planned for installation in about eight localities, including Riyadh, Wadi Dizan, Wadi Salah, Wadi Zimad, Wadi Hali, Wadi Abha, and two other places.

(b) Staff gaging stations are to be established at the following Wadis: Rabigh, Khulais, Fatima, Yiba, Dhamad, Sabya, Tasher, and Dughab. These stations also measure floods but require the services of an observer.

(c) Meteorological stations are to be constructed at the following places: Abha, Khamis al Yemen, Al Darb, Al Qunfidha, Jizan, Sabia, Sabt, Al Ward, Taif, Yanbu, Hail, Bisha and Tebuk. These will automatically measure rainfall, temperature, humidity, and wind velocity.

(d) In addition, recording gages are integrated for wells at Dizan, Zimad, Khulais, Wadi Dawir and Wadi Bayah.

ARTICLE IV. ADMINISTRATION OF PROJECT

1. In carrying out this project, the Minister shall provide the following:

(a) The land upon which the installation will be erected.

(b) Local labor for constructing the buildings and shelters, and assistance in the installation of equipment.

(c) Local observers who will report instrument readings to the proper authorities.

(d) All local construction materials required.

(e) Transportation of instruments and materials to building sites, and petroleum products for required vehicles.

(Note: Items in this section are shown in detail in Appendix "A" attached hereto and by this reference made a part hereof.)

2. The Director shall designate a technical specialist, acceptable to the Ministry, to serve in a technical capacity in project activity. From Funds allocated in Article V of this Agreement the Director shall:

(a) Provide the scientific instruments required in each station.

(b) Provide for supervision of installation of instruments.

3. The Minister shall be responsible for securing the cooperation and coordination of government officials, local authorities and persons in the areas of activity.

ARTICLE V. FUNDING

1. From the contributions of the two Governments to the Natural Resources Program Agreement, there is allocated for the execution of this project the following sums:

		Dollar Equivalent
Share of SAG	S.R. 162,311	45,000
Share of USA	$ 8,500	8,500

2. The funds so allocated are for payment of expenses estimated in Appendix "A".

3. The funds herein allocated shall be available for expenditure at any time during the continuation of this project agreement; provided, however, that obligations incurred shall not exceed the total allocation of both parties hereto.

ARTICLE VI. ENTRY INTO FORCE AND DURATION

This Project Agreement shall enter into force on the day that it is signed and shall remain in force until three months after either party shall have given notice in writing to the other of intention to terminate it, but in no event shall it extend beyond the life of the Natural Resources Program Agreement.

Done in duplicate, in English and Arabic languages, at Riyadh, Saudi Arabia, this _____ day of _____, 1974.

_____	_____
Director	Minister of Agriculture
United States of America Operations Mission to Saudi Arabia, Ambassador	Kingdom of Saudi Arabia, Ambassador

APPENDIX "A"

Estimated Items of Expenditure for the Project
Meteorological and Hydrological Stations Project

Project No. 1 - [illegible]

Object of Expenditure	Amount by SAO Riyals	Amount by SAO Dollar Equivalent	Amount by U.S. Govt. Dollars
Local Labor	56,138	15,296	
Local Observers	8,655	2,358	
Transportation of Things	7,340	2,000	
Local Equipment	1,028	280	
Local Materials	81,944	22,328	
Demonstration Prof. & Scientific Equip.			[illegible] 18,548
Installation of Equipment			700
Transportation, Freight, etc.			272
Petroleum Products & Spares	10,040	2,738	
	162,831	45,000	[illegible] 11,500

Article IV

2

a. (add this sentence...) Delivery of scientific instruments to the several project sites, however, shall be carried out only upon completion of the shelter or housing required for such instruments at that site

AGREEMENT
FOR ESTABLISHMENT OF
METEOROLOGIC AND HYDROLOGIC STATIONS
BETWEEN
THE GOVERNMENT OF THE KINGDOM OF SAUDI ARABIA
AND
THE GOVERNMENT OF THE UNITED STATES OF AMERICA

The Government of the United States of America and the Government of the Kingdom of Saudi Arabia have agreed as follows:

ARTICLE I. COOPERATIVE PARTICIPATION

Pursuant to the General Agreement for Technical Cooperation signed on behalf of the two Governments at Jidda on January 17, 1951, and to the Agreement for the Technical Cooperation Program in Natural Resources between the Governments of the United States of America and the Kingdom of Saudi Arabia dated November 10, 1952, this Project Agreement for the establishment of meteorologic and hydrologic stations in Saudi Arabia is entered into between the Government of the Kingdom of Saudi Arabia, represented by the Minister of Agriculture (hereinafter referred to as the "Minister"), and the Government of the United States of America, represented by the Director of the United States of America Operations Mission to Saudi Arabia (hereinafter referred to as the "Director").

ARTICLE II. OBJECTIVE

1. The great strides made in man's understanding of the weather are largely due to the development of weather instruments that are used in conjunction with visual observations. While the airplane Pilot requires detailed data on the weather, the farmer, the herdsman, fisherman and others could also use this information.

2. A primary purpose of this project is to establish a series of recording stream-gaging stations, meteorologic stations, staff stations and recording well gages with which wadi stage and water levels in wells, the amount of rainfall, the temperature, humidity and wind velocity can be accurately recorded. It is also proposed to maintain records of these results so that basic data may be compiled for Saudi Arabia. The main objective of this project is to assist the Government of the Kingdom of Saudi Arabia in making such meteorologic and hydrologic data available for the design of flood control and water diversion works, the choice of crops, to determine numbers of wells and their pumping rates, and for other purposes.

ARTICLE III. PLAN OF OPERATION

1. The general plan of operation will be as follows:

(a) Recording gaging stations will be constructed to measure floods automatically. It is suggested that they be installed in about eight localities, including Wadi Hanifa at Riyadh, Wadi Gizan, Wadi Baish, Wadi Itwad, Wadi Hali and Wadi Abha.

(b) Staff gaging stations are suggested for the following Wadis: Rabigh, Khulais, Fatima, Yiba, Dhamad, Sabya, Tasher, Bisha, and Meghab. These stations also measure floods but require the services of an observer.

(c) Meteorologic stations are suggested for construction at the following places: Abha, Dhahran al Yemen, Al Darb, Al Qunfidha, Jidda, Medina, Meccs, Qasim, Hofuf, Al Kharj, Taif, Yenbo, Hail, Diba, and Tebuk. These will automatically measure rainfall, temperature, humidity and wind velocity.

(d) In addition, recording gages are contemplated for wells at Qasim, Gizan, Itwad, Khulais, Wadi Hanifa and at Hayyir in Wadis Hanifa, Aussat and Shaib Ha, and other places as exploration drilling progresses.

ARTICLE IV. ADMINISTRATION OF PROJECT

1. In carrying out this project, the Minister shall provide the following:

(a) The land upon which the installation will be erected.

(b) Local Labor for constructing the buildings and shelters, and assistance in the installation of equipment.

(c) Local observers who will report instrument readings to the proper authorities.

(d) All local construction materials required.

(e) Transportation of instruments and materials to building sites, and petroleum products for required vehicles.

(Note: Items in this section are shown in detail in Appendix "A" attached hereto and by this reference made a part hereof.)

2. The Director shall designate a technical specialist, acceptable to the Ministry, to serve in a technical capacity in project activity. From funds allocated in Article V of this Agreement the Director shall:

(a) Provide the scientific instruments required in each station. Delivery of scientific instruments to the several project sites, however, shall be carried out only upon completion of the shelter or housing required for such instruments at that site.

(b) Provide for supervision of installation of instruments.

3. The Minister shall be responsible for securing the cooperation and coordination of Government officials, local authorities and persons in the areas of activity.

ARTICLE V. FINANCING

1. From the contributions of the two Governments to the Natural Resources Program Agreement, there is allocated for the execution of this project the following sums:

		Dollar Equivalent
Share of SAG	S.R. 184,504	50,546
Share of USA	$ 12,500	12,500

2. The funds so allocated are for payment of expenses estimated in Appendix "A".

3. The funds herein allocated shall be available for expenditure at any time during the continuation of this project agreement; provided, however, that obligations incurred shall not exceed the total allocation of both parties hereto.

ARTICLE VI. ENTRY INTO FORCE AND DURATION

This Project Agreement shall enter into force on the day that it is signed and shall remain in force until three months after either party shall have given notice in writing to the other of intention to terminate it, but in no event shall it extend beyond the life of the Natural Resources Program Agreement.

Done in duplicate, in English and Arabic languages, at Jidda, Saudi Arabia, this _____ day of _____, 1954.

Director United States of America Operations Mission to Saudi Arabia	Minister of Agriculture Kingdom of Saudi Arabia

APPENDIX "A"

Estimated Items of Expenditure for the
Meteorologic and Hydrologic Stations Project

Project No. 1 FY-1954

Object of Expenditure	Amount by SAG Riyals	Amount by SAG Dollar Equivalent	Amount by U.S. Govt. Dollars
Local Labor	66,060	18,000	
Local Observers	8,655	2,358	
Transportation of Things	7,340	2,000	
Local Equipment	1,651	450	
Local Materials	90,750	25,000	
Demonstration Prof. & Scientific Equip.			11,528
Installation of Equipment			700
Transportation, Freight, etc.			272
Petroleum Products & Spares	10,048	2,738	
	184,504	50,546	12,500

USA OPERATIONS MISSION TO SAUDI ARABIA
American Embassy - Jidda

February 23, 1954

Brigadier General O. L. Grover
Commander, 1414th Air Base Group (USAFE)
APO 616, c/o Postmaster
New York, N.Y.

Dear General Grover:

On the chance that you have not as yet received my letter to you dated February 20, the bearer has kindly agreed to give this copy to you tomorrow and if it will be possible for you to give him your reply, I shall appreciate it very much.

Mr. J. M. H. Langford, Deputy Representative, Middle East Region, International Civil Aviation Organization, with headquarters in Cairo, is now in Jidda and is interested in having a meeting here with Point IV, FAO, your meteorologist and others concerned for the purpose of trying to develop an adequate meteorological system for this country.

Kindest regards to you.

Sincerely yours,

Harland J. Corson
Director
USA Operations Mission to Saudi Arabia

Encl. -
Letter to Gen.Grover
dated Feb. 20, 1954.

First Draft
F. C. passed by MPA Napleton
1/16/54

AGREEMENT
FOR ESTABLISHMENT OF
METEOROLOGIC AND HYDROLOGIC STATIONS
BETWEEN
THE GOVERNMENT OF THE KINGDOM OF SAUDI ARABIA
AND
THE GOVERNMENT OF THE UNITED STATES OF AMERICA

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ARTICLE II. OBJECTIVE

1. The great strides made in man's understanding of the weather are largely due to the development of weather instruments that are used in conjunction with visual observations. While the airplane pilot requires detailed data on the weather, the farmer, the herdsman, fisherman and

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ARTICLE III. PLAN OF OPERATION

1. The general plan of operation will be as follows:

(a) Recording gaging stations will be constructed to measure floods automatically. It is suggested that they be installed ~~They are planned for installation~~ in about eight localities, including Wadi Hanifa at Riyadh, Wadi Gizan, Wadi Baish, Wadi Itwad, Wadi Hali, Wadi Abha, ~~and two other~~ places.

(b) Staff gaging stations are ~~to be established at~~ suggested for the following Wadis: Rabigh, Khulais, Fatima, Yiba, Dhamad, Sabya, Tasher, Bisha, and Maghab. These stations also measure floods but require the services of an observer.

(c) Meteorologic stations are ~~to be constructed~~ suggested for construction at the following places: Abha, Bahran al Yemen, Al Darb, Al Qunfidha, ~~Jidda~~, Medina, Mecca, Qasim, Hofuf, Al Kharj, Taif, Yenbo, Hail, Diba ~~and~~ Tebuk, Jon. These will automatically measure rainfall, temperature, humidity, and wind velocity.

(d) In addition, recording gages are contemplated for wells at Qasim, Gizan, Itwad, Khulais, Wadi Hanifa and at Hayyir, in Wadi Hanifa, Gizan and other places and Hydrotherm drilling Shaib Hay, and prospects.

ARTICLE IV. ADMINISTRATION OF PROJECT

1. In carrying out this project, the Minister shall provide the following:

(a) The land upon which the installation will be erected.

(b) Local labor for constructing the buildings and shelters, and assistance in the installation of equipment.

(c) Local observers who will report instrument readings to the proper authorities.

(d) All local construction materials required.

(e) Transportation of instruments and materials to building sites, and petroleum products for required vehicles.

(Note: Items in this section are shown in detail in Appendix "A" attached hereto and by this reference made a part hereof.)

2. The Director shall designate a technical specialist, acceptable to the Ministry, to serve in a technical capacity in project activity. From funds allocated in Article V of this Agreement the Director shall:

(a) Provide the scientific instruments required in each station. Delivery of scientific instruments to the several project sites, however, shall be carried out only upon completion of the shelter or housing required for such instruments at that site.

(b) Provide for supervision of installation of instruments.

ARTICLE V. FINANCING

1. From the contributions of the two Governments to the Natural Resources Program Agreement, there is allocated for the execution of this project the following sums:

		Dollar Equivalent
Share of SAG	S.R. ~~162,011~~ 184,504	~~45,000~~ 50,546
Share of USA	$ ~~8,500~~ 12,500	~~8,500~~ 12,500

2. The funds so allocated are for payment of expenses estimated in Appendix "A".

3. The funds herein allocated shall be available for expenditure at any time during the continuation of this project agreement; provided, however, that obligations incurred shall not exceed the total allocation of both parties hereto.

ARTICLE VI. ENTRY INTO FORCE AND DURATION

This Project Agreement shall enter into force on the day that it is signed and shall remain in force until three months after either party shall have given notice in writing to the other of intention to terminate it, but in no event shall it extend beyond the life of the Natural Resources Program Agreement.

Done in duplicate, in English and Arabic languages, at Jidda, Saudi Arabia, this _____ day of _____, 1954.

Director United States of America Operations Mission to Saudi Arabia	Minister of Agriculture Kingdom of Saudi Arabia

APPENDIX "A"

Estimated Items of Expenditure for the
Meteorologic and Hydrologic Stations Project

Project No. 1 FY-1954

Object of Expenditure	Amount by SAG Riyals	Amount by SAG Dollar Equivalent	Amount by U.S. Govt. Dollars
Local Labor	~~56,198~~ 66,060.	~~15,296~~ 18,000	
Local Observers	8,655	2,358	
Transportation of Things	7,340	2,000	
Local Equipment	~~1,028~~ 1,651	~~280~~ 450	
Local Materials	~~81,944~~ 90750	~~22,300~~ 25,000	
Demonstration Prof. & Scientific Equip.			~~10,500~~ 11,528
Installation of Equipment			700
Transportation, Freight, etc.			272
Petroleum Products & Spares	10,048	2,738	
	~~162,811~~ 184,504	~~45,000~~ 50,546	~~11,500~~ 12,500

18,000
2,358
2,000
450
25,000
2,738
50,546